VT830

6U ATCA SlotSaver Chassis with Dual Switching Shelf Managers

VT830

Key Features

- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3
- 40G or 10G ATCA 6-slot backplane with Dual Star base and fabric (Full Mesh optional)
- Split power distribution (odd slots on A1/B1, even slots on A2/B2)
- Redundant Power supplies AC (DC or AC/DC optional):
- Up to four AC supply at 1300W each (N+1)
- 6 Rear Transition Module (RTM) slots

Benefits

- Unprecedented performance density in a 6U horizontal shelf
- Densest Switching Shelf Manager (SSM) with full status LEDs, 10GbE SFP+, GbE ports, RS-232 de-bug ports, and Telco alarm
- Electrical, mechanical, software, and system-level expertise in house
- Superior shelf management solution from VadaTech
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

AdvancedTCA®

40G

vadatech
THE POWER OF VISION

VT830

The VT830 features dual Switching Shelf Managers (SSMs) that combines VadaTech's 3rd Generation Shelf Manager with integrated GbE/10GbE/40GbE switches on the same module. This allows two slots in the system to be used as Nodes (Payload Boards) versus having the slots otherwise be allocated as dedicated switching Hubs in the system.

The 6U 6-slot SlotSaver ATCA Chassis conforms to the latest PICMG 3.0 specification in 10G or 40G configurations. The Shelf has a 19" rackmount form factor compliant to EIA-310. The VT830 Shelf offers 10GbE/1GbE Layer 2 managed switches or 40GbE/10GbE/1GbE Layer 3 managed switches. The Switching Shelf Managers have RTM capabilities for rear I/O.

The AC input of the Shelf provides N+1 redundancy, with options for DC or AC/DC combined configurations. The 6U ATCA Shelf offers exceptional thermal management with each slot dissipating up to 375W in a redundant push/pull configuration. The fan trays and air filters are all separately removable.

Power Supply

The VT830 shelf uses up to 4x swappable 1300W AC power supplies or 2x 90 Amp DC Power Entry Modules. The input voltage is from 100-240V AC or -36 to – 72V DC.

Cooling and Temperature Sensors

The SlotSaver chassis has dual intelligent cooling units in a push-pull configuration (right-to-left). The redundancy allows fail-safe operation in case one of the cooling units becomes non-operational. There are a total of 6 temperature sensors in the chassis that monitor the airflow and temperature throughout the shelf.

Shelf Input/Output

RTM (Rear Transition Module) are available per slot including the Switch/Shelf Manager slots.

Switching Shelf Manager (SMM)

By combining the switch and shelf manager functions, two extra payload slots are available in the chassis. The SMM offers:
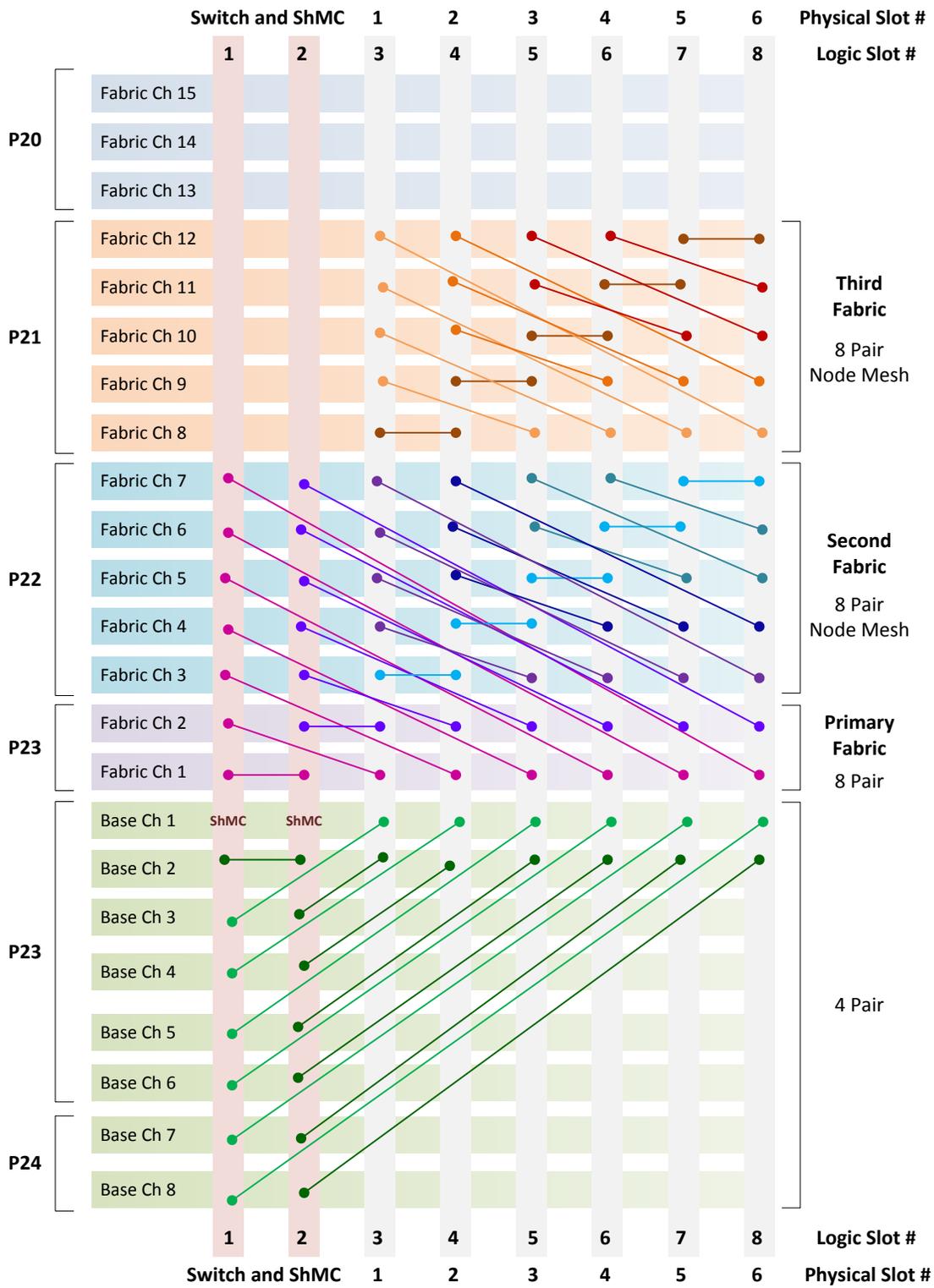
- Layer 2 GbE/10GbE
- Layer 3 GbE/10GbE/40GbE
- Use as protocol analyzer to monitor, inject, capture, and validate I2C traffic on the IPMB
- GUI to validate and display the IPMI packets or schedule messages for injection into the shelf
- Fully hot-swappable to minimize service down time
- VadaTech Scorpionware™ Software

Scorpionware™ Software

VadaTech's Scorpionware software can be used to access information about the current state of the Shelf or the Carrier, obtain information such as the FRU population, or monitor alarms, power management, current sensor values, and the overall health of the Shelf. The software GUI is very powerful, providing a Virtual Carrier and FRU construct for a simple, effective interface.

Backplane Routing

VT830 – 6U ATCA SlotSaver Chassis with Dual Switching Shelf Managers

info@vadatech.com | www.vadatech.com

Specifications

Architecture		
Physical	**Dimensions**	Height: 6U
		Width: 19"
		Depth: 13" (handles protrude and additional 2" out the front of the shelf))
Type	**ATCA Shelf**	6 Slot ATCA Payload
Standards		
ATCA	**Type**	PICMG 3.0 Rev 3.0
Configuration		
Environmental	**Temperature**	Operating: 0° to 55° C
		Storage Temperature: –40° to +70°C
	Relative Humidity	5 to 95 per cent, non-condensing
Conformal Coating		Humiseal 1A33 Polyurethane (Optional)
		Humiseal 1B31 Acrylic (Optional)
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Warranty	Two (2) years	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and µTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VT830 – ABC-DEF-GHJ

A = Power Supply	D = Base Switch (GbE)	G = Number of SFP+ SR Transceivers**
0 = Reserved 1 = AC x1 (single, total of 1300W) 2 = AC x2 (dual, total of 2600W) 3 = AC x3 (triple, total of 3900W) 4 = AC x4 (quad, total of 5200W) 5 = Dual PEM -36VDC to -72VDC 6 = Custom	0 = None 1 = Layer 2 Managed (C=0 only) 2 = Layer 3 Managed (C=1 only)	0 = None 1 – 8 = Number of transceivers (** Must be 0 if C=1)
B = Backplane	**E = Fabric Switch (10/40 GbE)**	**H= Number of QSFP+ SR Transceivers***
0 = Dual Star (10GbE) 1 = Full Mesh (10GbE 2 = Dual Star (40GbE) 3 = Full Mesh (40GbE)	0 = None 1 = 10GbE Layer 2 Managed (C=0 only) 2 = 10/40GbE Layer 3 Managed (C=1 only)	0 = None 1 – 4 = Number of transceivers (*** Must be 0 if C=0)
C = Switched Shelf Manager	**F = Number of SFP+ LR Transceivers***	**J = Temperature and Conformal Coating**
0 = Dual VT030 (10GbE) 1 = Dual VT031 (10/40 GbE)	0 = None 1 – 8 = Number of transceivers (* Must be 0 if C=1)	0 = Commercial, no coating (-5 to +55° C) 1 = Commercial Humiseal 1A33 Polyurethane (-5 to +55° C) 2 = Commercial, 1B31 Acrylic (-5 to +55° C) 3 = Industrial, no coating (-20 to + 70° C) 4 = Industrial, Humiseal 1A33 Polyurethane (-20 to + 70° C) 5 = Industrial, 1B31 Acrylic (-20 to + 70° C)

Related Products

VT030

- 10GbE Switching Shelf Manager eliminates need for separate switch slots
- Compliant to PICMG 3.0 base and PICMG 3.1 fabric interface (10GbE/GbE) specifications
- Compact 1.0" H x 5.685" W x 11.096" D size

ATC807

- Managed Layer two 10GbE and 1GbE switch
- 10GbE to the Fabric channel for 15 Node slots (option 9 or 1 selectable per port basis)
- GbE to Base Interface for 15 Node slots plus two Shelf

VT000

- Powers a single ATCA module
- IPMI hardware address and parity
- Fuse on each of the power rails

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhu Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

info@vadatech.com | www.vadatech.com

Europe: EMCOMO Solutions AG

Industriestr. 10, 89231 Neu-Ulm, Germany
Phone: +49 731 8803510 | Fax: +49 731 88035129

vadatech@emcomo.de | www.emcomo.de

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited

vadatech
THE POWER OF VISION